

**Minor Modification to a Covered Source**  
**Review Summary**

**Application No.:** 0088-22

**Permit No.:** 0088-01-C

**Applicant:** Chevron Products Company

**Facility Title:** Petroleum Refinery  
Located At: 91-480 Malakole Street, Kapolei, Oahu

**Mailing Address:** Chevron Products Company  
91-480 Malakole Street  
Kapolei, Hawaii 96707

**Responsible Official:** Mr. Alan Davis  
Refinery Manager  
Chevron Products Company  
Ph: (808) 682-5711

**Point of Contact:** Mr. Marcus Ruscio  
Environmental Specialist  
Chevron Products Company  
Ph: (808) 682-2282

**Application Dates:** June 19, 2014

**Proposed Project:**

SICC 2911 (Petroleum Refining)

Chevron Products Company is applying for a Minor Modification to a Covered Source Permit. Chevron proposes to utilize external floating roof Tank 104 (T-104) as a swing tank for crude oil and recovered oil (crude water draw and crude sump) while Tank 113 (T-113) is taken out of service for required maintenance in October 2014. Tank 104 is needed to store recovered oil from the refinery's crude tank water draws and crude sump during this maintenance. Chevron is requesting to add T-104 to Attachment II(F) – Effluent Treatment Plant section of the covered source permit, as T-104 is only listed in Attachment II(B) – Petroleum Storage Tanks section of the covered source permit. Thus, Tank 104 will be subject to the same applicable federal requirements as Tank 113 and listed in Attachment II(B) and II(F) as Tank 113 currently is. Modifying Tank 104 to accommodate recovered oil service will not increase air pollutant emissions based on:

1. Vapor pressure of stored material will be equal to or less than the crude oil stored at the refinery due to additional water content from crude tank water draws;
2. No change in production capacity; and
3. Additional VOC controls (guidepole sleeve) will be installed on T-104.

This modification is considered a minor modification since it:

1. Does not increase the emissions of any air pollutant above the permitted emission limits;
2. Does not result in or increase the emissions of any air pollutant not limited by permit to levels equal to or above:
  - a. 500 pounds per year of a hazardous air pollutant, except lead;
  - b. 300 pounds per year of lead;
  - c. Twenty-five (25) percent of significant amounts of emission as defined in Section 11-60.1-1, paragraph (1) in the definition of "significant"; or
  - d. Two (2) tons per year of each regulated air pollutant not already identified above;
3. Does not violate any applicable requirement;
4. Does not involve significant changes to existing monitoring requirements or any relaxation or significant change to existing reporting or recordkeeping requirements in the permit. Any change to the existing monitoring, reporting, or recordkeeping requirements that reduces the enforceability of the permit is considered a significant change;
5. Does not require or change a case-by-case determination of an emission limitation or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
6. Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement, and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emissions cap assumed to avoid classification as a modification pursuant to any provision of Title I of the Act or subchapter 7; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated pursuant to Section 112(i)(5) of the Act or subchapter 9; and
7. Is not a modification pursuant to any provision of Title I of the Act.

The permit modification application fee of \$200.00 for a minor modification was submitted by the applicant and processed.

**Equipment Description:**

One (1) - 149,000 bbl external floating roof storage tank identified as Tank 104(T-104). Tank 104 may store crude or recovered oil.

**Applicable Requirements:**

Hawaii Administrative Rules (HAR)

Title 11, Chapter 59	Ambient Air Quality Standards
Title 11, Chapter 60.1	Air Pollution Control
Subchapter 1	General Requirements
Subchapter 2	General Prohibition
HAR 11-60.1-31	Applicability
HAR 11-60.1-39	Storage of Volatile Organic Compounds
Subchapter 5	Covered Sources

- Subchapter 6      Fees for Covered Sources, Noncovered Sources, and Agricultural Burning
  - HAR 11-60.1-111 Definitions
  - HAR 11-60.1-112 General Fee Provisions for Covered Sources
  - HAR 11-60.1-113 Application Fees for Covered Sources
  - HAR 11-60.1-114 Annual Fees for Covered Sources
  - HAR 11-60.1-115 Basis of Annual Fees for Covered Sources
- Subchapter 9      Hazardous Air Pollutant Sources
  - HAR 11-60.1-174 Maximum Achievable Control Technology (MACT) Emission Standards
  - HAR 11-60.1-180 National Emission Standards for Hazardous Air Pollutants

Code of Federal Regulations (CFR)

- 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPS)
  - Subpart FF – National Emission Standards for Benzene Waste Operations
- 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT)
  - Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

**Non-Applicable Requirements:**

Hawaii Administrative Rules (HAR)

- Title 11, Chapter 60.1 Air Pollution Control
  - Subchapter 7      Prevention of Significant Deterioration Review
  - Subchapter 8      Standards of Performance for Stationary Sources

Federal Requirements

- 40 CFR Part 52.21 – Prevention of Significant Deterioration of Air Quality
- 40 CFR Part 60 - Standards of Performance for New Stationary Sources (NSPS)

**Best Available Control Technology (BACT):**

A Best Available Control Technology (BACT) analysis is applicable only to new covered sources and significant modifications to covered sources that have the potential to emit or a net emissions increase above significant levels as defined in HAR §11-60.1-1. A BACT analysis is not applicable since there are no significant net emission increases.

**Prevention of Significant Deterioration (PSD):**

A PSD major modification is defined as a project at an existing major stationary source that will result in a significant emissions increase and a significant net emissions increase of any pollutant subject to regulations approved pursuant to the Clean Air Act as defined in 40 CFR §52.21. Since there are no significant emission increases for these modifications, PSD is not triggered.

**Air Emissions Reporting Requirements (AERR):**

40 CFR Part 51, Subpart A – Air Emissions Reporting Requirements, is based on the emissions of criteria air pollutants from Type A and B point sources (as defined in 40 CFR Part 51, Subpart A), that emit at the AERR triggering levels as shown in the table below:

Pollutant	Type A Triggering Levels <sup>1,2</sup> (tpy)	Type B Triggering Levels <sup>1</sup> (tpy)	Pollutant	In-house Total Facility Triggering Levels <sup>1</sup> (tpy)
NO <sub>x</sub>	≥2500	≥100	NO <sub>x</sub>	≥25
SO <sub>2</sub>	≥2500	≥100	SO <sub>2</sub>	≥25
CO	≥2500	≥1000	CO	≥250
PM <sub>10</sub> /PM <sub>2.5</sub>	≥250/250	≥100/100	PM/PM <sub>10</sub>	≥25/25
VOC	≥250	≥100	VOC	≥25
Pb		≥5	Pb	≥5
			HAPS	≥5

<sup>1</sup> Based on potential emissions

<sup>2</sup> Type A sources are a subset of Type B sources and are the larger emitting sources by pollutant

The Chevron Hawaii petroleum refinery exceeds the Type A triggering levels. Therefore, AERR requirements are applicable.

The Clean Air Branch also requests annual emissions reporting from those facilities that have facility-wide emissions of a single air pollutant exceeding in-house triggering levels or is a covered source. Annual emissions reporting for the facility will be required for in-house recordkeeping purposes since this is a covered source.

**Compliance Assurance Monitoring (CAM):**

No change from Covered Source Permit No. 0088-01-C.

**Synthetic Minor Source:**

No change from Covered Source Permit No. 0088-01-C.

**Insignificant Activities:**

No change from Covered Source Permit No. 0088-01-C.

**Alternate Operating Scenarios:**

No change from Covered Source Permit No. 0088-01-C.

**Project Emissions:**

Modifying Tank 104 to accommodate recovered oil service will not increase air pollutant emissions based on:

1. Vapor pressure of stored material will be equal to or less than the crude oil stored at the refinery due to additional water content from crude tank water draws;
2. No change in production capacity; and
3. Additional VOC controls (guidepole sleeve) will be installed on T-104.

**Ambient Air Quality Assessment:**

An ambient air quality impact analysis (AAQIA) is not required for minor modifications.

**Significant Permit Conditions:**

The following permit conditions and forms in the covered source permit were modified or added. As is custom when modifying regulatory language, new language is underlined, while [deleted language is shown in brackets].

1. Revised Attachment II(B), Special Condition No. C.3. as follows:
  3. Storage tanks identified in Special Condition No. A.1.b. of this Attachment shall only store crude oil, except Storage Tanks 104 (T-104) and 113 (T-113) may store crude oil or recovered oil.(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)
2. Revised Attachment II(F), Special Condition No. A.1.g. as follows:
  - g. [Crude Water Draw Tank] Crude Water Draw/Recovered Oil Tanks identified as Storage Tanks T-104 and T-113.
3. Revised Attachment II(F), Special Condition No. B.2. as follows:
  2. The API Separators, Benzene Recovery Unit, Recovered Oil Sump, Skim Oil Tank, Wastewater Surge Tank, Recovered Oil Tank, and Crude Water Draw/Recovered Oil Tanks are subject to the following federal requirements:
    - a. 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP),
      - i. Subpart A, General Provisions; and
      - ii. Subpart FF, National Emission Standard for Benzene Waste Operations.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.180; 40 CFR §61.01, §61.340)<sup>1</sup>

4. Revised Attachment II(F), Special Condition No. C.11 as follows:

11. The Wastewater Surge Tank, Recovered Oil Tank, and Crude Water Draw/Recovered Oil Tanks shall be equipped with an external floating roof meeting the requirements of 40 CFR §60.112b(a)(2).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-180; 40 CFR §61.351)<sup>1</sup>

5. Revised Attachment II(F), Special Condition No. D.23 as follows:

23. For the Wastewater Surge Tank, Recovered Oil Tank, and Crude Water Draw/Recovered Oil Tanks, the permittee shall comply with the recordkeeping requirements in 40 CFR §60.115b.

(Auth.: HAR §11-60.1-3, 11-60.1-90, §11-60.1-180; 40 CFR §61.356)<sup>1</sup>

6. Revised Attachment II(F), Special Condition No. E.11 as follows:

11. For the Wastewater Surge Tank, Recovered Oil Tank, and Crude Water Draw/Recovered Oil Tanks, the permittee shall comply with the reporting requirements in 40 CFR §60.115b.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-180, 40 CFR §61.357)<sup>1</sup>

**Conclusion and Recommendations:**

Recommend issuance of the minor modification to existing Covered Source Permit (CSP) No. 0088-01-C, subject to the significant permit conditions above. All other permit conditions issued with CSP No. 0088-01-C on February 22, 1999 and amended on January 22, 2002, April 16, 2002, March 3, 2003, June 28, 2006, April 24, 2007, August 13, 2007, November 8, 2007, July 22, 2008, September 11, 2009, November 4, 2009, and April 22, 2013, shall not be affected and shall remain valid. A 45-day EPA review period is also required.

Reviewer: Darin Lum  
Date: 8/2014